

Appl. No. 10/573,606
Amdt. Dated September 13, 2007
Reply to Office action of June 14, 2007
Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1-12 (Cancelled)

13. (Amended) An optical imaging contrast agent with affinity for an abnormally expressed biological target associated with colorectal cancer (CRC), said contrast agent being of formula I:

V-L-R (I)

wherein:

V is one or more vector moieties having affinity for an abnormally expressed target in CRC, where said target is selected from c-met, MMP-14, COX-2, beta-catenin and cathepsin B;

L is a linker moiety or a bond, and

R is one or more reporter moieties detectable in optical imaging,

wherein the contrast agent has a molecular weight below 10,000 Daltons.

14. (Cancelled) A contrast agent as claimed in claim 13 of formula I

V-L-R (I)

wherein V is one or more vector moieties having affinity for an abnormally expressed target in CRC, L is a linker moiety or a bond and R is one ore more reporter moieties detectable in optical imaging.

15. (Amended) A contrast agent as claimed in claim 13 wherein R is a cyanine dye.

16. (Previously presented) A contrast agent as claimed in claim 13 wherein the target is a receptor or a non-catalytical target.

17. (Previously presented) A contrast agent as claimed in claim 13 comprising a contrast agent substrate, wherein the target is an abnormally expressed enzyme, such that the contrast agent changes pharmacodynamic properties and/or pharmacokinetic properties upon a

Appl. No. 10/573,606

Amdt. Dated September 13, 2007

Reply to Office action of June 14, 2007

chemical modification from a contrast agent substrate to a contrast agent product upon a specific enzymatic transformation.

18. (Previously presented) A contrast agent as claimed in claim 17 wherein the contrast agent changes binding properties to specific tissue, membrane penetration properties, protein binding or solubility properties upon the chemical modification.

19. (Cancelled) ~~A contrast agent as claimed in claim 13 having affinity for any of the targets selected from COX-2, beta-catenin, E-cadherin, P-cadherin, kinases, Her-2, MMPs, cyclins, P53, thymidylate synthase, VEGF receptors, EGF receptors, K-ras, adenomatous polyposis coli protein, cathepsin B, uPAR, c-met, mucins and gastrin receptors.~~

20. (Amended) A contrast agent as claimed in claim 13 wherein V is selected from peptides, peptoid moieties, oligonucleotides, oligosaccharides, lipid-related compounds and traditional organic drug-like small molecules.

21. (Previously presented) A contrast agent as claimed in claim 20 wherein V is a peptide.

22. (Previously presented) A pharmaceutical composition for optical imaging for diagnosis of CRC, for follow up of progress of CRC development or for follow up of treatment of CRC, comprising a contrast agent as defined in claim 13 together with at least one pharmaceutically acceptable carrier or excipient.

23. (Previously presented) A contrast agent as claimed in claim 13 for the manufacture of a diagnostic agent for use in a method of optical imaging of CRC involving administration of said diagnostic agent to an animate subject and generation of an image of at least part of said subject.

24. (Previously presented) A method of generating an optical image of an animate subject involving administering a contrast agent to the subject and generating an optical image of at

Appl. No. 10/573,606

Amdt. Dated September 13, 2007

Reply to Office action of June 14, 2007

least a part of the subject to which the contrast agent has distributed, characterized in that a contrast agent as defined in claim 13 is used.